

10 What Is Claimed Is:.

sbB' 1 A method for manufacturing a papermaker's fabric,
said method comprising the steps of:

providing a laminated structure, said laminated
structure having a bottom layer and a top layer, said
5 bottom layer and said top layer each being strips of
equivalent width and being laminated together, said
bottom layer being transversely offset with respect to
said top layer so that an unlaminated portion of said
bottom layer is along one lateral edge of said
10 laminated structure and an unlaminated portion of said
top layer is along the other lateral edge of said
laminated structure;

spirally winding said laminated structure in a
plurality of turns wherein said unlaminated portion of
15 said top layer in one turn of said laminated structure
overlies said unlaminated portion of said bottom layer
in an adjacent turn of said laminated structure; and

joining said overlying unlaminated portion of said
top layer to said unlaminated portion of said bottom
20 layer to form said papermaker's fabric, said
papermaker's fabric being in the form of an endless
loop having an inner surface and an outer surface.

2. A method as claimed in claim 1 wherein said step
of joining is performed by sewing.

3. A method as claimed in claim 1 wherein said step
of joining is performed by stitching.

4. A method as claimed in claim 1 wherein said step
of joining is performed by gluing.

5. A method as claimed in claim 1 wherein said step of joining is performed by melting.

6. A method as claimed in claim 1 wherein said step of joining is performed by welding.

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7. A method as claimed in claim 1 wherein said step of providing a laminated structure comprises the steps of:

4 providing ^{the} a bottom layer, said bottom layer being
5 a base for said laminated structure.

6 providing ^{the} a top layer, said top layer being adapted to support a paper web in a paper machine;
forming a sandwich of said top and bottom layers, said bottom layer being transversely offset with
10 respect to said top layer; and

attaching said top and bottom layers together to form said laminated structure.

8. A method as claimed in claim 7 wherein said step of attaching is performed by sewing.

9. A method as claimed in claim 7 wherein said step of attaching is performed by needling.

10. A method as claimed in claim 7 wherein said step of attaching is performed by gluing.

11. A method as claimed in claim 7 wherein said step of attaching is performed by fusing.

12. A method as claimed in claim 7 wherein said step of attaching is performed by melting.

13. A method as claimed in claim 1 further comprising the step of attaching at least one additional layer of staple fiber material to said papermaker's fabric.

14. A method as claimed in claim 13 wherein said attaching step is carried out on said inner surface of said papermaker's fabric.

15. A method as claimed in claim 13 wherein said attaching step is carried out on said outer surface of said papermaker's fabric.

16. A method as claimed in claim 13 wherein said at least one additional layer of staple fiber material is in the form of a strip spiralled onto one of said inner and outer surfaces of said papermaker's fabric.

17. A method as claimed in claim 13 wherein said at least one additional layer of staple fiber material is applied full-width onto one of said inner and outer surfaces of said papermaker's fabric.

18. A method as claimed in claim 1 further comprising the step of providing a base fabric for said papermaker's fabric, said base fabric being in the form of an endless loop, said endless loop having an inner surface, an outer surface, a first and a second lateral edge, and a fabric width measured transversely between said lateral edges, wherein said laminated structure is spirally wound in a plurality of turns upon said outer surface of said base fabric.

19. A method as claimed in claim 1 further comprising the steps of:

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providing a base fabric for said papermaker's fabric, said base fabric being in the form of an endless loop, said endless loop having an inner surface, an outer surface, a first and a second lateral edge, and a fabric width measured transversely between said lateral edges; and

slipping said base fabric inside said papermaker's fabric.

20. A method as claimed in claim 1, wherein said laminated structure is a first laminated structure, further comprising the steps of:

providing a second laminated structure, said second laminated structure also having a bottom layer and a top layer, said bottom layer and said top layer each being strips of equivalent width and being laminated together, said bottom layer being transversely offset with respect to said top layer so that an unlaminated portion of said bottom layer is along one lateral edge of said second laminated structure and an unlaminated portion of said top layer is along the other lateral edge of said second laminated structure;

spirally winding said second laminated structure in a plurality of turns upon said papermaker's fabric, wherein said unlaminated portion of said top layer in one turn of said second laminated structure overlies said unlaminated portion of said bottom layer in an adjacent turn of said second laminated structure; and

joining said overlying unlaminated portion of said top layer to said unlaminated portion of said bottom layer.

21. A method as claimed in claim 20 wherein said second laminated structure is spirally wound in a direction opposite to that in which said first laminated structure is wound.

36B2 22. A papermaker's fabric for a paper machine, said papermaker's fabric comprising:

5 a laminated structure, said laminated structure having a bottom layer and a top layer, said bottom layer and said top layer each being strips of equivalent width and being laminated together, said bottom layer being transversely offset with respect to said top layer, so that an unlaminated portion of said bottom layer is along one lateral edge of said
10 laminated structure and an unlaminated portion of said top layer is along the other lateral edge of said laminated structure; said laminated structure being spirally wound in a plurality of turns wherein said unlaminated portion of said top layer in one turn of
15 said laminated structure overlies said unlaminated portion of said bottom layer in an adjacent turn of said laminated structure; said overlying unlaminated portion of said top layer being joined to said unlaminated portion of said bottom layer.

23. A papermaker's fabric as claimed in claim 22 further comprising at least one additional layer of staple fiber material attached to one of the inner and outer surfaces of said papermaker's fabric.

24. A papermaker's fabric as claimed in claim 23 wherein said at least one additional layer of staple fiber material is in the form of a strip spiralled onto

one of said inner and outer surfaces of said
5 papermaker's fabric.

25. A papermaker's fabric as claimed in claim 23
wherein said at least one additional layer of staple
fiber material is applied full-width onto one of said
inner and outer surfaces of said papermaker's fabric.

26. A papermaker's fabric as claimed in claim 22
further comprising a base fabric in the form of an
endless loop, said endless loop having an inner surface
and an outer surface, wherein said laminated structure
5 is spirally wound upon said outer surface of said base
fabric.

27. A papermaker's fabric as claimed in claim 22
further comprising a base fabric in the form of an
endless loop, said endless loop having an inner surface
and an outer surface, wherein said base fabric is inside
5 said papermaker's fabric.

28. A papermaker's fabric as claimed in claim 22
wherein said laminated structure is a first laminated
structure and further comprising a second laminated
structure, said second laminated structure also having
5 a bottom layer and a top layer, said bottom layer and
said top layer each being strips of equivalent width
and being laminated together, said bottom layer being
transversely offset with respect to said top layer, so
that an unlaminated portion of said bottom layer is
10 along one lateral edge of said second laminated
structure and an unlaminated portion of said top layer
is along the other lateral edge of said second
laminated structure; said second laminated structure

being spirally wound in a plurality of turns upon said
15 papermaker's fabric wherein said unlaminated portion of
said top layer in one turn of said second laminated
structure overlies said unlaminated portion of said
bottom layer in an adjacent turn of said second
laminated structure; said overlying unlaminated portion
20 of said top layer being joined to said unlaminated
portion of said bottom layer.

29. A papermaker's fabric as claimed in claim 22
wherein said top layer of said laminated structure
comprises one of the materials selected from the group
consisting of: staple fiber material; fabric woven from
5 fibers or filaments; spun-bond, hydroentangled and
melt-blown nonwoven fabrics; and apertured extruded
polymeric films.

30. A papermaker's fabric as claimed in claim 22
wherein said top layer of said laminated structure
comprises at least two distinct sublayers, each of said
sublayers comprising one of the materials selected from
5 the group consisting of: staple fiber material; fabric
woven from fibers or filaments; spun-bond,
hydroentangled and melt-blown nonwoven fabrics; and
apertured extruded polymeric films.

31. A papermaker's fabric as claimed in claim 22
wherein said bottom layer of said laminated structure
comprises one of the materials selected from the group
consisting of: staple fiber material; fabric woven from
5 fibers or filaments; spun-bond, hydroentangled and
melt-blown nonwoven fabrics; apertured extruded
polymeric films; knitted fabrics; nonwoven netting
materials or mesh fabrics; and woven fabric strips.

32. A papermaker's fabric as claimed in claim 22 wherein said bottom layer of said laminated structure comprises at least two distinct sublayers, each of said sublayers comprising one of the materials selected from
5 the group consisting of: staple fiber material; fabric woven from fibers or filaments; spun-bond, hydroentangled and melt-blown nonwoven fabrics; apertured extruded polymeric films; knitted fabrics; nonwoven netting materials or mesh fabrics; and woven
10 fabric strips.

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